REMARKS

Section 102 rejection based on *Raz I*[1]

As best understood from the office action, the Examiner proposes to map the teaching of *Raz I* to claim 1 in the following manner:

A data storage system comprising:	The union of data storage systems **10** and **12** in FIG. 1.
at least one primary storage device partitioned into a plurality of volumes for storing data;	The devices **80** and **82** shown in FIG. 1.
a first database including first configuration data for identifying which of a plurality of hosts coupled to the data storage system have authorized access to selected volumes of the at least one primary storage device;	A first database stored on the devices **80** and **82**.
a backup system having at least one backup storage device for storing at least a portion of data stored on the primary storage device; and	The data storage system **12** with its devices **90** and **92**.
a second database including second configuration data for identifying which of the plurality of hosts coupled to the data storage system have access to the at least one backup storage device.	A second database stored on the devices **90** and **92**.

One flaw in the proposed mapping is that, in *Raz I*, the first database stores data used for "decision making, data analysis, forecasting, and time-series analysis."[2] *Raz I* contains no teaching or suggestion of a first database that contains "first configuration data" as required by claim 1.

Another flaw in the proposed mapping is that the second database, which is stored on devices **90** and **92**, is a mirrored copy of the first database. Accordingly, the second database also

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[1] *Raz*, et al., U.S. Patent No. 5,852,715.
[2] *Raz I*, col. 1, lines 35-36.

contains data used for decision making, data analysis, forecasting, and time-series analysis. It does not contain "second configuration data" as required by claim 1.

Yet another flaw in the proposed mapping is that the first and second databases of *Raz I* are intended to be identical. This is inconsistent with claim 1, which recites first and second databases that potentially contain *different* data. In particular, claim 1 specifies that the first database identify which hosts have access to *primary* storage, and that the second database identify which hosts have access to *backup* storage.

With regard to claim 9, Applicant draws attention to the recitation of "a first database used by the hosts to determine which hosts have authorized access to the volumes."

As discussed above, the only database *Raz I* refers to is the database that contains the working data used for the specific application (decision analysis, forecasting, etc.). *Raz I* fails to teach a database that is used by the hosts to determine which hosts can access the volumes.

To sustain a section 102 rejection, a cited reference must teach each and every limitation of the claim. As noted above, *Raz I* fails to do so. Accordingly, the section 102 rejection of claims 1 and 9 is improper and ought to be withdrawn.

The dependent claims contain the same limitations as their respective parent claims and are therefore allowable for at least the same reasons. Accordingly, the section 102 rejections of the dependent claims are likewise improper and ought to be withdrawn.

Section 102 rejection based on *Raz II*[3]

As best understood from the office action, the Examiner proposes to map the teaching of *Raz II* to claim 1 in the following manner:

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[3] *Raz*, et al., U.S. Patent No. 5,860,137.

Applicant : Steven Blumenau et al.
Serial No. : 09/521,902
Filed : March 9, 2000
Page : 4 of 6

Attorney's Docket No.: 07072-922001 / EMC 99-001

A data storage system comprising:	The data storage system **14** in FIG. 1.
at least one primary storage device partitioned into a plurality of volumes for storing data;	A physical drive (not explicitly shown) that contains logical volumes **20** (see FIG. 2).
a first database including first configuration data for identifying which of a plurality of hosts coupled to the data storage system have authorized access to selected volumes of the at least one primary storage device;	The ownership table **38** stored in locally accessible memory 31 (see FIG. 2).
a backup system having at least one backup storage device for storing at least a portion of data stored on the primary storage device; and	The "backup host processor" referred to in col. 4, line 35.
a second database including second configuration data for identifying which of the plurality of hosts coupled to the data storage system have access to the at least one backup storage device.	A copy of the ownership table **38** that is presumably maintained by the backup host processor. Alternatively, a copy of the ownership table **38** maintained by another host processor (see col. 4, lines 55-57).

One flaw in the proposed mapping is that the backup host processor does not have "at least one backup storage device for storing at least a portion of data stored on the primary storage device" as required by claim 1. Instead, the backup host processor has data that it needs to replace the managing host processor should the latter become disabled.[4]

By way of analogy, one might have a library, a librarian who maintains a card catalog, and a backup librarian with an identical copy of the card catalog. In such a case, if the library were to burn down, it would clearly be impossible to reconstruct all the books in the library using the copy of the card catalog. This is because there is a distinction between the data itself (i.e. the books) and data used to manage that data (i.e. the card catalog).

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[4] *Raz II*, col. 4, lines 31-35 ("In addition, it may be desirable to have a backup for handling those management functions. Then,. in ht e event that the managing host processor should become inoperative, responsibility for the management function(s) can automatically transfer to the backup host processor").

Applicant : Steven Blumenau et al.   Attorney's Docket No.: 07072-922001 / EMC 99-001
Serial No. : 09/521,902
Filed : March 9, 2000
Page : 5 of 6

In the same way, neither the managing host processor nor the backup host processor in *Raz II* maintain copies of all the data stored in the data storage system 14 itself. What the managing host processor, and its backup, maintain is a local memory 31 containing a number of files that are useful in managing the data storage system. Among these files is the ownership table 38.

Hence, the backup host processor cannot be said to store "at least a portion of data stored *on the primary storage device*" as required by the claim. Instead, what the backup host processor stores is a copy of data stored in the local memory 31 by the managing host processor.

Another flaw in the proposed mapping is that *Raz II* teaches a system in which the ownership table 38 in local memory 31 is intended to be identical to the ownership table 38 in a backup processor or in any other host processor 12.

In contrast, claim 1 recites first and second configuration data that are potentially distinct from each other. The *first* configuration data identifies hosts that have access to *primary* storage; the *second* configuration identifies hosts that have access to *backup* storage.

Claim 9 recites a method for managing access between hosts and a backup system. The rejection of claim 9 is fundamentally flawed because there is no teaching in *Raz II* of any backup data storage system. The only backup taught by *Raz II* is the backup host processor that is intended to take over should the managing host processor fail.

Raz II lacks any teaching of a data storage system receiving a request from a host 12 to access data stored on a backup system. What *Raz II* teaches is a data storage system that accepts requests for data stored *in the data storage system itself*.

To sustain a section 102 rejection, a cited reference must teach each and every limitation of the claim. As noted above, *Raz II* fails to do so. Accordingly, the section 102 rejection of claims 1 and 9 is improper and ought to be withdrawn.

Applicant : Steven Blumenau et al.
Serial No. : 09/521,902
Filed : March 9, 2000
Page : 6 of 6

Attorney's Docket No.: 07072-922001 / EMC 99-001

The dependent claims contain the same limitations as their respective parent claims and are therefore allowable for at least the same reasons. Accordingly, the section 102 rejections of the dependent claims are likewise improper and ought to be withdrawn.

No additional fees are believed to be due in connection with the filing of this response. However, to the extent fees are due, or if a refund is forthcoming, please adjust our deposit account 06-1050, referencing attorney docket "07072-922001."

Respectfully submitted,

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